

Montana Department of Transportation
Research Program
February 2008

**EXPERIMENTAL PROJECT
FOR THE EVALUATION OF VARIOUS PAVEMENT FABRIC AND MAT
APPLICATIONS TO RETARD REFLECTIVE CRACKING
(Work Plan)**

Location: Flesher Pass - East – S279, C000279; RP 22.2-30.5

Project Number: STPS 279-1(15)22: Control No. 6234000

Type of Project: Pavement Reinforcement

Principal Investigator: Craig Abernathy
Experimental Projects Manager

Date of Construction: Summer of 2008

Objective:

Experimental assessment of various pavement reinforcement systems in effort to determine effectiveness of these treatments for potential use in future road construction projects for the reduction of reflective cracking.

Experimental Design:

¹This project will incorporate four test sections with one control at 300 ft. in length each:

1. GlasGrid 8512: Crack placement only;
Fiberglass Geogrid.
2. GlasPave 25: Entire roadway application;
Fiberglass Matrix.
3. PavePrep: Crack placement only;
High-density Polyester Mastic.
4. TruPave: Entire roadway application;
Non-woven Fiberglass/Polyester Hybrid Mat
5. Control: No treatment.

Evaluation Procedures:

Research and Construction staff will be present onsite during the placement of the sections to document and assess each treatments performance on issues such of placement and any other constructability concerns with the chosen material and subsequent seal and cover. Information from all participants will be collected to complete the initial report on constructability performance on each section.

All sections will entail a detailed crack mapping for use as an ongoing evaluation tool and as a potential guide for placement of the Glasgrid and PavePrep. Note: Per the manufacturers guidelines a .700" (approximately 3/4 inch) isolation lift is required for application of the above mentioned products. Not applicable for Glaspave and Trupave.

Once paved these section will be delineated for ongoing pavement analysis that will encompass semi-annual evaluations for the annual report.

Estimated Project Cost:

Pending.

Evaluation Schedule:

A post-construction report consensus relating to the initial effectiveness of each treatment during installing will be published. Research staff will monitor pavement performance of each section for a period of five years annually, with every year after that reviewed informally, up to ten years. This is in accordance with the Department's "Experimental Project Procedures". Delivery of the construction evaluation, and annual reports are required as well as a final project report (responsibility of the Research Section).

2008:	Construction	Installation/construction report on initial application(s) performance.
2008-2012:	Annual Evaluations	A fall and spring site visit analysis will encompass the annual report.
2013:	Final Evaluation	Final Report